Electricity Basics

1. What type of current does a photovoltaic panel produce?
    a. Alternating
    b. Direct
    c. Battery
    d. Solar

2. The unit of electrical current flowing through a wire is:
    a. Volt
    b. Amp
    c. Watt
    d. Watt-hour
    e. Amp-hour

3. The unit of force that cause electrons to flow in a conductor is the:
    a. Volt
    b. Amp
    c. Watt
    d. Watt-hour
    e. Amp-hour

4. A PV panel produces 3 amps at 12 volts. The power produced is:

a. 12	1. Volts
b. 36	2. Amps
c. 4	3. Watts
d. 15	4. Watt-Hours
	5. Amp-hours

5. A PV panel produces 1.5 amps at 24 volts. The power produced is:

a. 1.5	1. Volts
b. 12	2. Amps
c. 24	3. Watts
d. 25.5	4. Watt-Hours
e. 36	5. Amp-hours

6. A PV array produces 2 amps at 24 volts for 3 hours. The energy produced is:

a. 2	1. Volts
b. 6	2. Amps
c. 12	3. Watts
d. 48	4. Watt-Hours
e. 144	5. Amp-hours

7. A 60 watt light bulb, operating at 120 V AC will draw how much current?

8. A 60 watt light bulb, operating at 12 V DC will draw how much current?

Note: 1,000 watt-hours = 1 kilowatt-hour

9. A PV array produces 2000 watts for 5 hours. How much energy is produced?

a. 400	1. Volts
b. 2,000	2. Amps
c. 10,000	3. Watts
d. 12,000	4. Watt-Hours
e. 10	5. Amp-hours

10. A PV array produces 400 watts for an average of 5 hours per day. How much energy is produced in 1 year?

a. 400	1. Volts
b. 2,000	2. Amps
c. 146	3. KiloWatts
d. 730	4. KiloWatt-Hours
e. 80	5. Amp-hours

11. Two 60 watt light bulbs are left on in the basement for one full month. At 10 cent a kilowatt hour, how much does that cost?